

REMARKS

Claims 1 through 18 are in the application, with Claims 1, 6, 11 and 16 being the independent claims herein. Reconsideration and further examination are respectfully requested.

Claims 1, 2, 6, 7, 11 and 12 are rejected under 35 U.S.C. §102 as allegedly being anticipated by U.S. Patent No. 6,965,160 ("Cobbley"); Claims 3, 4, 5, 8, 9, 10, 13, 14 and 15 are rejected under 35 U.S.C. §103 over Cobbley; and Claims 16-18 are rejected under 35 U.S.C. §103 over Cobbley in view of U.S. Patent No. 6,713,810 ("Bhattacharyya"). Reconsideration and withdrawal of the rejections are respectfully requested.

Claims 1 and 16

As described in the prior response, independent Claim 1 relates to an apparatus including an integrated circuit die, an integrated circuit package coupled to a first face of the integrated circuit die, and mold compound in contact with the integrated circuit die and the integrated circuit package (emphasis added). The mold compound includes a face substantially coplanar with a second face of the integrated circuit die, and the apparatus further includes an overlayer coupled to the face of the mold compound and to the second face of the integrated circuit die. The overlayer may, in some embodiments, reduce a tendency of the mold compound to delaminate from the die and/or the integrated circuit package.

The art of record is not seen to disclose or to suggest the foregoing features of Claim 1. More particularly, the art of record is not seen to disclose or to suggest mold compound in contact with an integrated circuit die and an integrated circuit package, wherein the mold compound includes a face substantially coplanar with a second face of the integrated circuit die, and an overlayer coupled to the face of the mold compound and to the second face of the integrated circuit die.

Taking Fig. 9 as a representative example, Cobbley describes array 150 including semiconductor dice 120 and dielectric filler material 136 that are coupled to flexible substrate 130 as shown. Redistribution lines 140 are formed on outer surface 138 of material 136. The

Office Action indicates that the "integrated circuit package" of Claims 1 and 16 reads on distribution lines 140. Applicants respectfully disagree.

As described at col. 8, lines 8 through 63 of Cobbley, redistribution lines 140 are conductive traces extending from exposed end portions 128 of conductive elements 126 to various predetermined locations on outer surface 138. Redistribution lines 140 may be formed thereon using "any known method for patterning a thin layer of material" (see col. 8, lines 37 and 38), or "may be preformed on a flexible dielectric tape or film carrier" (see col. 8, lines 45 and 46).

M.P.E.P §2111.01 indicates that the words of a claim must be interpreted broadly but consistently with their "plain meaning". The phrase "plain meaning" refers to the ordinary and customary meaning given to the words by those of ordinary skill in the art. Applicants submit that no interpretation of the words "integrated circuit package" can reasonably encompass redistribution lines 140, which merely consist of a thin layer of conductive traces.

The remaining art of record has been reviewed and is not seen to remedy the foregoing deficiencies in Cobbley. Specifically, Bhattacharyya is not seen to add any relevant description that, alone or in combination with Cobbley, would disclose or suggest mold compound in contact with an integrated circuit die and an integrated circuit package, wherein the mold compound includes a face substantially coplanar with a second face of the integrated circuit die, and an overlayer coupled to the face of the mold compound and to the second face of the integrated circuit die.

Amended independent Claim 1 is therefore believed to be in condition for allowance. Amended independent Claim 16 relates to a system including the elements of amended Claim 1 and is believed to be allowable for at least the foregoing reasons.

Claim 6

Independent Claim 6 relates to an apparatus including an integrated circuit package substrate and a plurality of integrated circuit die, wherein a first face of each of the plurality of

integrated circuit die is attached to the integrated circuit package substrate. The apparatus also includes mold compound in contact with the plurality of integrated circuit die and the integrated circuit package substrate, the mold compound comprising a face substantially coplanar with a second face of each of the plurality of integrated circuit die, and an overlayer coupled to the face of the mold compound and to the second face of each of the plurality of integrated circuit die.

As described above, the cited art is not seen to disclose or suggest an integrated circuit package substrate arranged as claimed in Claim 6. Specifically, neither Cobbley nor Bhattacharyya, taken alone or in any permissible combination, is seen to disclose or to suggest mold compound in contact with an integrated circuit die and an integrated circuit package substrate, wherein the mold compound includes a face substantially coplanar with a second face of each of a plurality of integrated circuit die, and an overlayer coupled to the face of the mold compound and to the second face of each of the plurality of integrated circuit die.

Amended Claim 6 and its respective dependent Claims 7 through 10 are therefore believed to be allowable.

Claim 11 (Start here)

Claim 11 concerns a method that includes including placing an overlayer in contact with a face of mold compound and a first face of an integrated circuit die substantially coplanar with the face of the mold compound. According to the method, a second face of the integrated circuit die is coupled to an integrated circuit package, and the mold compound is in contact with the integrated circuit die and the integrated circuit package.

Nowhere does Cobbley disclose an integrated circuit package. Accordingly, Cobbley cannot be seen to disclose or to suggest coupling a second face of an integrated circuit die to an integrated circuit package, and/or mold compound in contact with the integrated circuit die and the integrated circuit package. Amended independent Claim 11 and dependent Claims 12 through 15 are therefore believed to be in condition for allowance.

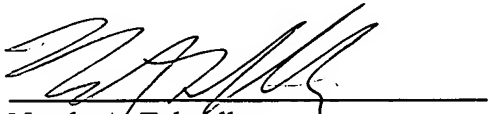
CONCLUSION

The outstanding Office Action presents a number of characterizations regarding each of the applied references, some of which are not directly addressed herein because they are not related to the rejections of the independent claims. Applicants do not necessarily agree with the characterizations and reserve the right to further discuss those characterizations.

For at least the reasons given above, it is submitted that the entire application is in condition for allowance and such action is respectfully requested at the Examiner's earliest convenience. Alternatively, if there remains any question regarding the present application or any of the cited references, or if the Examiner has any further suggestions for expediting allowance of the present application, the Examiner is cordially requested to contact the undersigned via telephone at (203) 972-0049.

Respectfully submitted,

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